Project Title

ToyCraft Tales: Tableau's Vision into Toy Manufacturer Data

Team ID: LTVIP2025TMID50208

Team Size: 3

Team Leader: Alikepalli Sirisha

Team Member: Shaik Dariya Vali

Team Member: G Jayachandra

---

1. INTRODUCTION

1.1 Project Overview

This project explores the US toy manufacturing industry using Tableau. It focuses on analyzing patterns, trends, and state-wise performance from the years 2005 to 2016. The dashboard and storyboards help stakeholders derive insights for strategic decisions.

1.2 Purpose

To visualize toy manufacturer data to identify trends over time, state contributions, and distribution of manufacturing units using Tableau's interactive dashboards.

---

2. IDEATION PHASE

2.1 Problem Statement

Toy manufacturers lack visibility into historical production data and geographic performance, making it difficult to plan future strategies.

2.2 Empathy Map Canvas

- **Who?** Toy manufacturers, decision-makers, stakeholders
- **Think & Feel?** Want clarity, insight into trends
- **See?** Fragmented or raw data
- **Hear?** Need for dashboards
- **Say & Do?** Seek visual insights
- **Pain?** No centralized visibility
- **Gain?** One-stop analytical dashboard

2.3 Brainstorming

- Use Tableau for interactive visuals
- Analyze time-based decline/growth

- Use maps and pie charts for geographic spread
- Show high/low performing states

---

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

Stage	Actions	Emotions	Pain Points
Data Access	Load CSVs into Tableau	Curious	Raw data not readable
Visualization	Create charts, dashboards	Confident	Layout issues
Insights	Story creation, sharing	Informed	Limited export options

3.2 Solution Requirement

- Tableau Desktop
- Clean CSV dataset
- Graphical representation of key metrics
- Dashboard and Story integration

3.3 Data Flow Diagram

CSV File → Tableau Data Pane → Visual Charts → Dashboard → Insights

3.4 Technology Stack

- **Tool:** Tableau
- **Language:** Drag-and-drop interface (no code)
- **Data:** CSV - Week 39: US Toy Manufacturers (2005–2016)

---

4. PROJECT DESIGN

4.1 Problem Solution Fit

The project fits by transforming raw manufacturer data into valuable visual narratives using Tableau's interactive capabilities.

4.2 Proposed Solution

An interactive Tableau dashboard and storyboard to showcase manufacturer trends, top-performing states, and manufacturer counts.

4.3 Solution Architecture

- **Input:** Dataset (CSV)
- **Process:** Import → Clean → Visualize
- **Output:** Dashboards + Storytelling

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

Phase	Timeline	Tools Used
Data Collection	Day 1	CSV, Excel
Visualization	Days 2–3	Tableau
Dashboard Design	Day 4	Tableau
Story Creation	Day 5	Tableau

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

- Dashboard Loading Time: < 2 seconds
- Filter Responsiveness: Immediate
- Story Navigation: Smooth across views

7. RESULTS

1. **Number of Manufacturers Over Time**
   Chart showing decline in manufacturers from 2005 to 2016

2. **Index Distribution of Manufacturers**
   Bar chart showing count and sum of index

3. **Measure Comparison Chart**
   Vertical bars for index and manufacturer count

4. **Top 10 States by Manufacturer Count**
   Horizontal bar chart

5. **Pie Chart – Index by States**
   Pie chart distribution of index

6. **Final Dashboard View**
   Full Tableau dashboard

7. **Storyboard View**
   Story point with navigation tabs

8. ADVANTAGES & DISADVANTAGES

Advantages: - Interactive and dynamic visuals - Fast insights without programming - Clear trend and state-wise distribution

Disadvantages: - Limited customization outside Tableau - Desktop version has licensing limits - No predictive analytics

---

9. CONCLUSION

The Tableau-based visualization system successfully uncovers historical trends in toy manufacturing, enabling better strategic planning and stakeholder insights.

---

10. FUTURE SCOPE

- Integration with live data sources
- Predictive analytics using Python/ML
- Mobile responsive dashboards
- Export functionality for reports

---

11. APPENDIX

Source Code: No programming used – Tableau visual interface
Dataset Link: Week 39 – US Toy Manufacturers (2005–2016)
GitHub Demo: [ToyCraft Tales on GitHub](#)